What is claimed is:

1. A copper alloy sputtering target most suitable for formation of an interconnection material of a semiconductor device, particularly for formation of a seed layer, wherein said target contains 0.4 to 5wt% of Sn, the structure of the target does not substantially contain any precipitates, and the resistivity of the target material is 2.3 $\mu\Omega$cm or more.

2. A copper alloy sputtering target according to claim 1, wherein said target contains 0.5 to 1wt% of Sn.

3. A copper alloy sputtering target most suitable for formation of an interconnection material of a semiconductor device, particularly for formation of a seed layer, wherein said target contains 0.2 to 5wt% of Al, the structure of the target does not substantially contain any precipitates, and the resistivity of the target material is 2.2 $\mu\Omega$cm or more.

4. A copper alloy sputtering target according to claim 3, wherein said target contains 0.5 to 1wt% of Al.

5. A copper alloy sputtering target most suitable for formation of an interconnection material of a semiconductor device, particularly for formation of a seed layer, wherein said target contains 0.3 to 5wt% of Ti, the structure of the target does not substantially contain any precipitates, and the resistivity of the target material is 9 $\mu\Omega$cm or more.

6. A copper alloy sputtering target according to claim 5, wherein said target contains 0.5 to 1wt% of Ti.

7. A copper alloy sputtering target most suitable for formation of an interconnection material of a semiconductor device, particularly for formation of a seed layer, wherein said target contains a total of 0.2 to 5wt% of at least one component selected from Sn, Al and Ti, the structure of the target does not substantially contain any precipitates, and the resistivity of the target material is greater than the resistivity of the copper alloy having the same composition in a thermal equilibrium state.

8. A copper alloy sputtering target according to claim 7, wherein said target contains a total of 0.5 to 1wt% of at least one component selected from Sn, Al and Ti.

9. A copper alloy sputtering target according to claim 7 or claim 8, wherein the increase in resistivity due to the alloying element is resistivity that is 1.2 times or more than that of the thermal equilibrium.

10. A copper alloy sputtering target according to any one of claims 1 to 9, wherein Na and K are respectively 0.5ppm or less; Fe, Ni, Cr and Ca are respectively 2ppm or less; U

and Th are respectively 1ppb or less, oxygen is 5ppm or less, hydrogen is 2ppm or less; and unavoidable impurities excluding alloying additional elements are 50ppm or less.

11. A copper alloy sputtering target according to any one of claims 1 to 9, wherein Na and K are respectively 0.1ppm or less; Fe, Ni, Cr and Ca are respectively 1ppm or less; U and Th are respectively 1ppb or less, oxygen is 5ppm or less, hydrogen is 2ppm or less; and unavoidable impurities excluding alloying additional elements are 10ppm or less.

12. A copper alloy sputtering target according to any one of claims 1 to 11, wherein the crystal grain size of the target material is 50μm or less, and the variation in the average grain size by location is within ±20%.

13. A copper alloy sputtering target according to any one of claims 1 to 12, wherein the variation in the alloying element of the target material is within 0.2%.

14. A copper alloy sputtering target according to any one of claims 1 to 13, wherein, when the alloy contains Al, the ratio I(111)/I(200) of the X-ray diffraction peak intensity I(111) of the (111) face and the X-ray diffraction peak intensity I (200) of the (200) face is 2.2 or more in the sputtering face, and, when the alloy contains Sn and/or Ti, the ratio I(111)/I(200) of the X-ray diffraction peak intensity I(111) of the (111) face and the X-ray diffraction peak intensity I (200) of the (200) face is 2.2 or less in the sputtering face, and the variation in I(111)/I(200) in the sputtering face is respectively within ±30%.

15. A manufacturing method of a copper alloy sputtering target according to any one of claims 1 to 14, comprising the steps of performing hot forging and/or hot rolling to a high purity copper alloy ingot obtained by vacuum melting; further performing cold rolling thereto; and thereafter sandwiching this with copper plates underwater and performing forced cooling thereto during heat treatment.